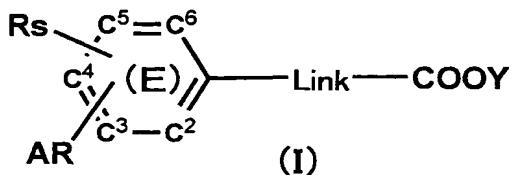


## CLAIMS

1. A compound represented by the formula (I):



[In the formula, Link represents a saturated or unsaturated straight hydrocarbon chain having 1 to 3 carbon atoms.

C<sup>2</sup>, C<sup>3</sup>, C<sup>4</sup>, C<sup>5</sup>, and C<sup>6</sup> in the aromatic ring (E) independently represent a ring-constituting carbon atom. One of the ring-constituting carbon atoms to which Rs and AR do not bind may be replaced with V.

V represents nitrogen atom, or carbon atom substituted with Zx. Zx represents a linear or branched saturated alkyl group having 1 to 4 carbon atoms, fluorine atom, chlorine atom, bromine atom, nitro group, -OR<sup>9</sup>, or -N(Rn<sup>1</sup>)(Rn<sup>2</sup>). R<sup>9</sup> represents hydrogen atom, a lower alkyl group having 1 to 4 carbon atoms, or -A<sup>6</sup>-Qp, wherein A<sup>6</sup> represents a single bond or methylene, Qp represents phenyl group, and the phenyl group may be substituted with one of T<sup>1</sup> or two or more of the same or different T<sup>1</sup>. T<sup>1</sup> represents a linear or branched saturated alkyl group having 1 to 4 carbon atoms, hydroxyl group, fluorine atom, chlorine atom, bromine atom, trifluoromethyl group, nitro group, an alkoxy group having 1 to 4 carbon atoms, or a mono- or dialkylamino group having 1 to 4 carbon atoms. Rn<sup>1</sup> represents hydrogen atom or a linear or branched saturated alkyl group having 1 to 4 carbon atoms, Rn<sup>2</sup> has the same meaning as Rn<sup>1</sup>, or represents -COR<sup>23</sup> or -SO<sub>2</sub>R<sup>24</sup>, or binds to Rn<sup>1</sup> to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to form a saturated nitrogen-containing cycloalkyl group or morpholino group. R<sup>23</sup> represents hydrogen atom, a lower alkyl group having 1 to 4 carbon

atoms, a lower alkoxy group having 1 to 4 carbon atoms,  $\cdot\text{O}\cdot\text{A}^6\cdot\text{Qp}$ , or  $\cdot\text{N}(\text{R}^{25})(\text{R}^{26})$ .  $\text{R}^{25}$  represents hydrogen atom, or a linear or branched saturated alkyl group having 1 to 4 carbon atoms.  $\text{R}^{26}$  has the same meaning as  $\text{R}^{25}$ , or binds to  $\text{R}^{25}$  to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to form a saturated nitrogen-containing cycloalkyl group or morpholino group.  $\text{R}^{24}$  represents a lower alkyl group having 1 to 4 carbon atoms, amino group, or a mono- or dialkylamino group having 1 to 4 carbon atoms.

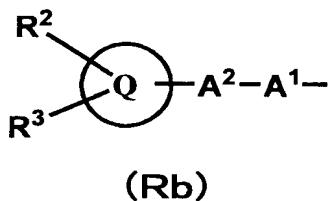
$\text{Rs}$  represents  $\cdot\text{D}\cdot\text{Rx}$  or  $\cdot\text{N}(\text{Ry})(\text{Rz})$ .

$\text{D}$  represents a single bond, oxygen atom, sulfur atom,  $\cdot\text{S}(\text{O})\cdot$ ,  $\cdot\text{S}(\text{O})_2\cdot$ , or  $\cdot\text{C}(\text{O})\cdot$ .

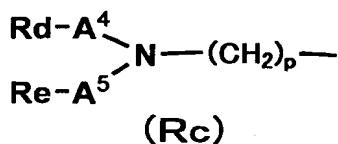
$\text{Rx}$  represents a linear or branched saturated alkyl group having 3 to 8 carbon atoms,  $\text{Ra}$  represented by the following formula:

$\text{R}^1(\text{CH}_2)_k\cdot \quad (\text{Ra})$

$\text{Rb}$  represented by the following formula:



or  $\text{Rc}$  represented by the following formula.



Symbol  $k$  in  $\text{Ra}$  represents 0 or an integer of 1 to 3.  $\text{R}^1$  represents a saturated cyclic alkyl group having 3 to 7 carbon atoms, or a condensed saturated cyclic alkyl group having 6 to 8 carbon atoms, and  $\text{R}^1$  may be substituted with one of lower alkyl group having 1 to 4 carbon atoms or two or more of the same or different

lower alkyl groups having 1 to 4 carbon atoms. Q in Rb represents a partially unsaturated or completely unsaturated monocyclic or condensed bicyclic carbon ring or a heterocyclic ring (q), and binds to A<sup>2</sup> at an arbitrary position on the ring. The heterocyclic ring (q) contains the same or different 1 to 4 ring-constituting heteroatoms selected from the group consisting of nitrogen atom, oxygen atom, and sulfur atom. A<sup>1</sup> represents a single bond or an alkylene (a) having 1 to 3 carbon atoms, and the alkylene (a) may be substituted with a lower alkyl group having 1 to 4 carbon atoms or phenyl group. A<sup>2</sup> represents a single bond, oxygen atom, sulfur atom, -S(O)-, -S(O)<sub>2</sub>-, or -N(R<sup>4</sup>)- (provided that when A<sup>2</sup> represents oxygen atom, sulfur atom, -S(O)-, -S(O)<sub>2</sub>- or -N(R<sup>4</sup>)-, A<sup>1</sup> represents ethylene or trimethylene). R<sup>2</sup> and R<sup>3</sup> independently represent hydrogen atom, a linear or branched saturated alkyl group having 1 to 4 carbon atoms, oxo group, thioxo group, fluorine atom, chlorine atom, bromine atom, trifluoromethyl group, -OR<sup>5</sup>, -N(R<sup>6</sup>)(R<sup>6</sup>'), -NHCOR<sup>7</sup>, -NHSO<sub>2</sub>R<sup>8</sup>, or -A<sup>6</sup>-Qa, or they bind to each other to represent methylenedioxy group. Qa represents a partially unsaturated or completely unsaturated monocyclic or condensed bicyclic carbon ring or a heterocyclic ring (qa), binds to A<sup>6</sup> at an arbitrary position on the ring, and may be substituted with one of T<sup>1</sup> or two or more of the same or different T<sup>1</sup>. The heterocyclic ring (qa) contains the same or different 1 to 4 ring-constituting heteroatoms selected from the group consisting of nitrogen atom, oxygen atom, and sulfur atom. R<sup>4</sup> and R<sup>6</sup> independently represent hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms. R<sup>5</sup> and R<sup>7</sup> independently represent hydrogen atom, a lower alkyl group having 1 to 4 carbon atoms, or -A<sup>6</sup>-Qa. R<sup>8</sup> represents a lower alkyl group having 1 to 4 carbon atoms. R<sup>6</sup>' has the same meaning as R<sup>6</sup>, or binds to R<sup>6</sup> to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to represent a saturated nitrogen-containing cycloalkyl group or morpholino group. Symbol p in R<sub>c</sub> represents an integer of 2 to 4. A<sup>4</sup> represents a single bond, methylene, or

ethylene.  $A^5$  represents  $-C(O)-$ ,  $-C(S)-$ , or  $-S(O)_2-$ .  $R_d$  represents hydrogen atom, an alkyl group having 1 to 8 carbon atoms, or  $Q_a$ .  $R_e$  represents an alkyl group having 1 to 8 carbon atoms,  $-A^6-Q_a$ ,  $-(CH_2)_iR^{14}$ ,  $-OR^{28}$ ,  $-SR^{28}$ , or  $-N(R^{29})(R^{30})$ . Symbol  $i$  represents an integer of 1 to 3,  $R^{14}$  represents hydroxyl group, an alkoxy group having 1 to 4 carbon atoms, carboxyl group, or an  $N,N$ -dialkylcarbamoyl group having 1 to 4 carbon atoms.  $R^{28}$  represents an alkyl group having 1 to 8 carbon atoms, or  $-A^6-Q_a$ .  $R^{29}$  represents an alkyl group having 1 to 8 carbon atoms, an alkoxy carbonyl group having 1 to 4 carbon atoms, or  $-A^6-Q_a$ .  $R^{30}$  represents hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms, or binds to  $R^{29}$  to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to represent a saturated nitrogen-containing cycloalkyl group or morpholino group.

$R_z$  has the same meaning as  $R_x$ , or  $R_z$  represents methyl group, ethyl group, or  $-A^5-Re$ .  $R_y$  represents hydrogen atom, an alkyl group having 1 to 8 carbon atoms, or  $-A^6-Q_p$ , or  $R_y$  may bind to  $R_z$  to form, together with a nitrogen atom to which they bind, a saturated or unsaturated 3 to 7-membered nitrogen-containing cyclic group, wherein said nitrogen-containing cyclic group may optionally be substituted with one or two lower alkyl groups having 1 to 4 carbon atoms wherein said two alkyl groups may be the same or different.

$AR$  represents a partially unsaturated or completely unsaturated condensed bicyclic carbon ring or a heterocyclic ring (ar), and may be substituted with one of  $X_a$  or two or more of the same or different  $X_a$ . The heterocyclic ring (ar) contains the same or different 1 to 4 ring-constituting heteroatoms selected from the group consisting of nitrogen atom, oxygen atom, and sulfur atom.  $X_a$  represents a linear or branched saturated alkyl group having 1 to 4 carbon atoms, a saturated cyclic alkyl group having 3 to 7 carbon atoms, oxo group, thioxo group, fluorine atom, chlorine atom, trifluoromethyl group,  $-(CH_2)_iR^{14}$ ,  $-OR^{10}$ ,  $-N(R^{11})(R^{12})$ ,

$\cdot\text{SO}_2\text{R}^{13}$ , or  $\cdot\text{COR}^{27}$ .  $\text{R}^{10}$  represents hydrogen atom, a lower alkyl group having 1 to 4 carbon atoms, or  $\cdot(\text{CH}_2)_i\text{R}^{14}$ .  $\text{R}^{11}$  represents hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms.  $\text{R}^{12}$  represents hydrogen atom, a lower alkyl group having 1 to 4 carbon atoms, a hydroxyalkyl group having 2 to 4 carbon atoms,  $\cdot\text{COR}^{15}$ , or  $\cdot\text{SO}_2\text{R}^{16}$ , or binds to  $\text{R}^{11}$  to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to represent a saturated nitrogen-containing cycloalkyl group or morpholino group.  $\text{R}^{15}$  represents a lower alkyl group having 1 to 4 carbon atoms, a hydroxyalkyl group having 2 to 4 carbon atoms, amino group, a mono- or dialkylamino group having 1 to 4 carbon atoms, or  $\cdot\text{A}^6\text{-Qa}$ .  $\text{R}^{13}$  and  $\text{R}^{16}$  independently represent a lower alkyl group having 1 to 4 carbon atoms, amino group, or a mono- or dialkylamino group having 1 to 4 carbon atoms.  $\text{R}^{27}$  represents hydrogen atom, hydroxyl group, an alkoxy group having 1 to 4 carbon atoms, a lower alkyl group having 1 to 4 carbon atoms, amino group, or a mono- or dialkylamino group having 1 to 4 carbon atoms.

$\text{Y}$  represents hydrogen atom, a lower alkyl group having 1 to 4 carbon atoms,  $\cdot(\text{CH}_2)_m\text{N}(\text{R}^{18})(\text{R}^{19})$ , or  $\cdot\text{C}(\text{R}^{20})_2\text{OC(O)A}^3\text{R}^{21}$ . Symbol  $m$  represents an integer of 2 or 3.  $\text{R}^{18}$  is the same as  $\text{R}^{19}$ , or binds to  $\text{R}^{19}$  to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to represent a saturated nitrogen-containing cycloalkyl group or morpholino group.  $\text{R}^{19}$  represents methyl group, ethyl group, or propyl group.  $\text{R}^{20}$  represents hydrogen atom, methyl group, ethyl group, or propyl group.  $\text{R}^{21}$  represents a lower alkyl group having 1 to 4 carbon atoms, a cyclic saturated alkyl group having 3 to 6 carbon atoms, or phenyl group, and  $\text{A}^3$  represents a single bond, or oxygen atom.] or a salt thereof.

2. The compound or salt thereof according to claim 1, wherein Link is  $\cdot(\text{CH}_2)_n\cdot$ ,  $n$  is an integer of 1 to 3,  $\text{Rz}$  has the same meaning as that of  $\text{Rx}$  or represents  $\cdot\text{A}^5\text{-Re}$  when  $\text{Rs}$  is  $\cdot\text{N}(\text{Ry})(\text{Rz})$ , and  $\text{Ry}$  is hydrogen atom, an alkyl group having 1 to 8 carbon atoms, or  $\text{A}^6\text{-Qp}$ , or  $\text{Ry}$  binds to  $\text{Rz}$  to form, together with a

nitrogen atom to which they bind, a saturated or unsaturated 3 to 7-membered nitrogen-containing cyclic group.

3. The compound or salt thereof according to claim 2, wherein AR is a residue of naphthalene, benzofuran, benzo[b]thiophene, indole, benzothiazole, dihydro-3H-benzothiazole, quinoline, dihydro-1H-quinoline, benzo[d]isothiazole, 1H-indazole, benzo[c]isothiazole, 2H-indazole, imidazo[1,2-*a*]pyridine, 1H-pyrrolo[2,3-*b*]pyridine, isoquinoline, dihydro-2H-isoquinoline, cinnoline, quinazoline, quinoxaline, 1H-benzimidazole, benzoxazole, 1H-pyrrolo[3,2-*b*]pyridine, benzo[1,2,5]thiadiazole, 1H-benzotriazole, 1,3-dihydropyrrolo[2,3-*b*]pyridine, 1,3-dihydrobenzimidazole, dihydro-3H-benzoxazole, phthalazine, [1,8]naphthalidine, [1,5]naphthalidine, 1H-pyrrolo[3,2-*c*]pyridine, 1H-pyrrolo[2,3-*c*]pyridine, 1H-pyrazolo[4,3-*b*]pyridine, 1H-pyrazolo[4,3-*c*]pyridine, 1H-pyrazolo[3,4-*c*]pyridine, 1H-pyrazolo[3,4-*b*]pyridine, [1,2,4]triazolo[4,3-*a*]pyridine, thieno[3,2-*c*]pyridine, thieno[3,2-*b*]pyridine, 1H-thieno[3,2-*c*]pyrazole, benzo[d]isoxazole, benzo[c]isoxazole, indolizine, 1,3-dihydroindole, 1H-pyrazolo[3,4-*d*]thiazole, 2H-isoindole, [1,2,4]triazolo[1,5-*a*]pyrimidine, 1H-pyrazolo[3,4-*b*]pyrazine, 1H-imidazo[4,5-*b*]pyrazine, 7H-purine, or 4H-chromene (the aforementioned residue may be substituted with one of Xa or two or more of the same or different Xa).

4. The compound or salt thereof according to claim 2, wherein AR is naphthalen-2-yl group, naphthalen-1-yl group, benzofuran-5-yl group, benzofuran-4-yl group, benzofuran-2-yl group, benzo[b]thiophen-5-yl group, benzo[b]thiophen-4-yl group, benzo[b]thiophen-2-yl group, indol-5-yl group, indol-4-yl group, indol-6-yl group, benzothiazol-6-yl group, benzothiazol-7-yl group, benzothiazol-5-yl group, benzothiazol-4-yl group, dihydro-3H-benzothiazol-6-yl group, dihydro-3H-benzothiazol-7-yl group, dihydro-3H-benzothiazol-5-yl group, dihydro-3H-benzothiazol-4-yl group, quinolin-6-yl group, quinolin-3-yl group, quinolin-5-yl group, quinolin-7-yl group, dihydro-1H-quinolin-6-yl group, dihydro-1H-quinolin-5-

yl group, benzo[d]isothiazol-5-yl group, benzo[d]isothiazol-4-yl group, benzo[d]isothiazol-6-yl group, benzo[d]isothiazol-7-yl group, 1H-indazol-5-yl group, 1H-indazol-4-yl group, 1H-indazol-6-yl group, benzo[c]isothiazol-5-yl group, benzo[c]isothiazol-4-yl group, benzo[c]isothiazol-6-yl group, benzo[c]isothiazol-7-yl group, 2H-indazol-5-yl group, 2H-indazol-4-yl group, 2H-indazol-6-yl group, imidazo[1,2-a]pyridin-6-yl group, imidazo[1,2-a]pyridin-7-yl group, 1H-pyrrolo[2,3-b]pyridin-5-yl group, 1H-pyrrolo[2,3-b]pyridin-4-yl group, isoquinolin-6-yl group, isoquinolin-3-yl group, isoquinolin-5-yl group, isoquinolin-7-yl group, dihydro-2H-isoquinolin-6-yl group, dihydro-2H-isoquinolin-5-yl group, cinnolin-6-yl group, cinnolin-5-yl group, quinazolin-6-yl group, quinazolin-7-yl group, quinazolin-5-yl group, quinoxalin-2-yl group, quinoxalin-6-yl group, quinoxalin-5-yl group, 1H-benzimidazol-5-yl group, 1H-benzimidazol-4-yl group, benzoxazol-5-yl group, benzoxazol-6-yl group, benzoxazol-4-yl group, benzoxazol-7-yl group, 1H-pyrrolo[3,2-b]pyridin-5-yl group, 1H-pyrrolo[3,2-b]pyridin-6-yl group, benzo[1,2,5]thiadiazol-5-yl group, benzo[1,2,5]thiadiazol-4-yl group, 1H-benzotriazol-5-yl group, 1H-benzotriazol-4-yl group, 1,3-dihydropyrrolo[2,3-b]pyridin-5-yl group, 1,3-dihydropyrrolo[2,3-b]pyridin-4-yl group, 1,3-dihydrobenzimidazol-5-yl group, 1,3-dihydrobenzimidazol-4-yl group, dihydro-3H-benzoxazol-6-yl group, dihydro-3H-benzoxazol-7-yl group, dihydro-3H-benzoxazol-5-yl group, dihydro-3H-benzoxazol-4-yl group, phthalazin-6-yl group, phthalazin-5-yl group, [1,8]naphthalidin-3-yl group, [1,8]naphthalidin-4-yl group, [1,5]naphthalidin-3-yl group, [1,5]naphthalidin-4-yl group, 1H-pyrrolo[3,2-c]pyridin-6-yl group, 1H-pyrrolo[3,2-c]pyridin-4-yl group, 1H-pyrrolo[2,3-c]pyridin-5-yl group, 1H-pyrrolo[2,3-c]pyridin-4-yl group, 1H-pyrazolo[4,3-b]pyridin-5-yl group, 1H-pyrazolo[4,3-b]pyridin-6-yl group, 1H-pyrazolo[4,3-c]pyridin-6-yl group, 1H-pyrazolo[4,3-c]pyridin-4-yl group, 1H-pyrazolo[3,4-c]pyridin-5-yl group, 1H-pyrazolo[3,4-c]pyridin-4-yl group, 1H-pyrazolo[3,4-b]pyridin-5-yl group, 1H-

pyrazolo[3,4-b]pyridin-4-yl group, [1,2,4]triazolo[4,3-a]pyridin-6-yl group, [1,2,4]triazolo[4,3-a]pyridin-7-yl group, thieno[3,2-c]pyridin-2-yl group, thieno[3,2-c]pyridin-3-yl group, thieno[3,2-c]pyridin-6-yl group, thieno[3,2-b]pyridin-2-yl group, thieno[3,2-b]pyridin-3-yl group, thieno[3,2-b]pyridin-5-yl group, thieno[3,2-b]pyridin-6-yl group, 1H-thieno[3,2-c]pyrazol-5-yl group, 1H-thieno[3,2-c]pyrazol-4-yl group, benzo[d]isoxazol-5-yl group, benzo[d]isoxazol-4-yl group, benzo[d]isoxazol-6-yl group, benzo[d]isoxazol-7-yl group, benzo[c]isoxazol-5-yl group, benzo[c]isoxazol-4-yl group, benzo[c]isoxazol-6-yl group, benzo[c]isoxazol-7-yl group, indolizin-7-yl group, indolizin-6-yl group, indolizine-8-yl group, 1,3-dihydroindol-5-yl group, 1,3-dihydroindol-4-yl group, 1,3-dihydroindol-6-yl group, 1H-pyrazolo[3,4-d]thiazol-5-yl group, 2H-isoindol-5-yl group, 2H-isoindol-4-yl group, [1,2,4]triazolo[1,5-a]pyrimidin-6-yl group, 1H-pyrazolo[3,4-b]pyrazin-5-yl group, 1H-imidazo[4,5-b]pyrazin-5-yl group, 7H-purin-2-yl group, 4H-chromen-6-yl group, or 4H-chromen-5-yl group (the aforementioned groups may be substituted with one of Xa or two or more of the same or different Xa).

5. The compound or salt thereof according to any one of claims 2 to 4 mentioned above, wherein Rs is -D-Rx or -N(Ry)(Rz), D is a single bond, oxygen atom, sulfur atom, -S(O)-, -S(O)₂-, or -C(O)-, Rx is a linear or branched saturated alkyl group having 3 to 8 carbon atoms, or Ra, Rb, or Rc, k in Ra is 0 or an integer of 1 to 3, R<sup>1</sup> is a saturated cycloalkyl group having 3 to 7 carbon atoms or a condensed saturated cycloalkyl group having 6 to 8 carbon atoms, R<sup>1</sup> may be substituted with one of lower alkyl group having 1 to 4 carbon atoms or two or more of the same or different lower alkyl groups having 1 to 4 carbon atoms, Q in Rb is phenyl group, thienyl group, furyl group, pyrrolyl group, pyridyl group, oxazolyl group, isoxazolyl group, thiazolyl group, isothiazolyl group, imidazolyl group, pyrazolyl group, oxadiazolyl group, thiadiazolyl group, triazolyl group, tetrazolyl group, naphthyl group, tetrahydronaphthyl group, indanyl group, indenyl group,

quinolyl group, isoquinolyl group, indolyl group, benzofuryl group, benzothienyl group, benzimidazolyl group, benzoxazolyl group, benzothiazolyl group, indazolyl group, 4H-chromenyl group, dihydrobenzodioxyl group, benzoisoxazolyl group, pyrrolopyridinyl group, pyrazolopyridinyl group, triazolopyridinyl group, thienopyridinyl group, thienopyrazolyl group, 1,3-dihydrobenzimidazole group, dihydro-3H-benzoxazole group, or dihydro-3H-benzothiazole group (the aforementioned groups bond to A<sup>2</sup> at an arbitrary position on the rings), A<sup>1</sup> is a single bond or an alkylene (a) having 1 to 3 carbon atoms, the alkylene (a) may be substituted with a lower alkyl group having 1 to 4 carbon atoms or phenyl group, A<sup>2</sup> is a single bond, oxygen atom, sulfur atom, -S(O)-, -S(O)<sub>2</sub>-, or -N(R<sup>4</sup>)- (provided that when A<sup>2</sup> represents oxygen atom, sulfur atom, -S(O)-, -S(O)<sub>2</sub>-, or -N(R<sup>4</sup>)-, A<sup>1</sup> represents ethylene or trimethylene), R<sup>2</sup> and R<sup>3</sup> independently represent hydrogen atom, a linear or branched saturated alkyl group having 1 to 4 carbon atoms, oxo group, thioxo group, fluorine atom, chlorine atom, bromine atom, trifluoromethyl group, -OR<sup>5</sup>, -N(R<sup>6</sup>)(R<sup>6</sup>'), -NHCOR<sup>7</sup>, -NHSO<sub>2</sub>R<sup>8</sup>, or -A<sup>6</sup>-Qa, or they bind to each other to represent methylenedioxy group, Qa is phenyl group, pyridyl group, oxazolyl group, isoxazolyl group, thiazolyl group, isothiazolyl group, imidazolyl group, pyrazolyl group, oxadiazolyl group, thiadiazolyl group, triazolyl group, tetrazolyl group, naphthyl group, indanyl group, indenyl group, quinolyl group, isoquinolyl group, indolyl group, benzofuryl group, benzothienyl group, benzimidazolyl group, benzoxazolyl group, benzothiazolyl group, or indazolyl group (the aforementioned groups may be substituted with one of T<sup>1</sup> or two or more of the same or different T<sup>1</sup>, and bind to A<sup>6</sup> at an arbitrary position on the rings), R<sup>4</sup> and R<sup>6</sup> independently represent hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms, R<sup>5</sup> and R<sup>7</sup> independently represent hydrogen atom, a lower alkyl group having 1 to 4 carbon atoms, or -A<sup>6</sup>-Qa, R<sup>8</sup> is a lower alkyl group having 1 to 4 carbon atoms, R<sup>6</sup>' has the same meaning as R<sup>6</sup>, or binds to R<sup>6</sup> to form a 3- to 6-membered ring

together with the nitrogen atom to which they bind to form a saturated nitrogen-containing cycloalkyl group or morpholino group, p in Rc is an integer of 2 to 4, A<sup>4</sup> is a single bond or methylene or ethylene, A<sup>5</sup> is -C(O)-, -C(S)-, or -S(O)<sub>2</sub>-, Rd is hydrogen atom, an alkyl group having 1 to 8 carbon atoms, or Qa, Re is an alkyl group having 1 to 8 carbon atoms, -A<sup>6</sup>-Qa, -(CH<sub>2</sub>)<sub>i</sub>R<sup>14</sup>, -OR<sup>28</sup>, -SR<sup>28</sup>, or -N(R<sup>29</sup>)(R<sup>30</sup>), i is an integer of 1 to 3, R<sup>14</sup> is hydroxyl group, an alkoxy group having 1 to 4 carbon atoms, carboxyl group, or an N,N-dialkylcarbamoyl group having 1 to 4 carbon atoms, R<sup>28</sup> is an alkyl group having 1 to 8 carbon atoms or -A<sup>6</sup>-Qa, R<sup>29</sup> is an alkyl group having 1 to 8 carbon atoms, an alkoxycarbonyl group having 1 to 4 carbon atoms, or -A<sup>6</sup>-Qa group, R<sup>30</sup> is hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms, or binds to R<sup>29</sup> to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to form a saturated nitrogen-containing cycloalkyl group or morpholino group, Rz has the same meaning as Rx, or is -A<sup>5</sup>-Re, and Ry is hydrogen atom, an alkyl group having 1 to 8 carbon atoms, or -A<sup>6</sup>-Qp, or binds to Rz to form a saturated or unsaturated nitrogen-containing cyclic substituent having 3 to 7 atoms together with nitrogen atom to which they binds.

6. The compound or salt thereof according to any one of claims 2 to 5, wherein Rs is -O-Rx.

7. The compound or salt thereof according to claim 2, wherein AR binds to C<sup>3</sup> in the aromatic ring (E), and Rs binds to one of the ring-constituting carbon atoms C<sup>4</sup>, C<sup>5</sup>, and C<sup>6</sup>.

8. The compound or salt thereof according to claim 2, wherein AR binds to C<sup>2</sup> in the aromatic ring (E), and Rs binds to one of the ring-constituting carbon atoms C<sup>3</sup>, C<sup>4</sup>, and C<sup>5</sup>.

9. The compound or salt thereof according to claim 7, wherein Rs is -O-Rx, and all of C<sup>2</sup>, C<sup>3</sup>, C<sup>4</sup>, C<sup>5</sup>, and C<sup>6</sup> in the aromatic ring (E) are not replaced with V.

10. The compound or salt thereof according to claim 8, wherein n is an

integer of 2, and Y is hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms.

11. The compound or salt thereof according to claim 7, wherein Rs binds to the ring-constituting carbon atom C<sup>5</sup> or C<sup>6</sup> in the aromatic ring (E).

12. The compound or salt thereof according to claim 11, wherein Rs is -O-Rx, and all of C<sup>2</sup>, C<sup>3</sup>, C<sup>4</sup>, C<sup>5</sup>, and C<sup>6</sup> in the aromatic ring (E) are not replaced with V.

13. The compound or salt thereof according to claim 12, wherein n is an integer of 2, and Y is hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms.

14. The compound or salt thereof according to claim 7, wherein Rs binds to C<sup>4</sup> in the aromatic ring (E), and C<sup>6</sup> is replaced with V.

15. The compound or salt thereof according to claim 14, wherein n is an integer of 2, V is carbon atom substituted with Zx, D is oxygen atom, and Y is hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms.

16. The compound or salt thereof according to claim 7, wherein Rs binds to C<sup>4</sup> in the aromatic ring (E), C<sup>5</sup> is nitrogen atom, and C<sup>2</sup> and C<sup>6</sup> are unsubstituted ring-constituting carbon atoms.

17. The compound or salt thereof according to claim 16, wherein n is an integer of 2, Rs is -O-Rx, and Y is hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms.

18. The compound or salt thereof according to claim 7, wherein Rs binds to C<sup>4</sup> in the aromatic ring (E), C<sup>5</sup> is a ring-constituting carbon atom substituted with Zx, or an unsubstituted ring-constituting carbon atom, C<sup>2</sup> and C<sup>6</sup> are unsubstituted ring-constituting carbon atoms, and Rs is -N(Ry)(Rz).

19. The compound or salt thereof according to claim 1, wherein Link is -(CH<sub>2</sub>)<sub>n</sub>-, n is an integer of 1 to 3, C<sup>2</sup> and C<sup>6</sup> in the aromatic ring (E) are unsubstituted ring-constituting carbon atoms, AR binds to C<sup>3</sup> in the aromatic ring

(E), and R<sub>s</sub> is -N(R<sub>y</sub>)(R<sub>z</sub>) and binds to C<sup>4</sup> in the aromatic ring (E).

20. The compound or salt thereof according to claim 19, wherein n is 2, and C<sup>5</sup> is carbon atom substituted with Z<sub>x</sub> or unsubstituted ring-constituting carbon atom.

21. The compound or salt thereof according to claim 19 or 20, wherein AR is naphthalen-2-yl group, naphthalen-1-yl group, benzofuran-5-yl group, benzofuran-4-yl group, benzofuran-2-yl group, benzo[b]thiophen-5-yl group, benzo[b]thiophen-4-yl group, benzo[b]thiophen-2-yl group, indol-5-yl group, indol-4-yl group, indol-6-yl group, benzothiazol-6-yl group, benzothiazol-7-yl group, benzothiazol-5-yl group, benzothiazol-4-yl group, dihydro-3H-benzothiazol-6-yl group, dihydro-3H-benzothiazol-7-yl group, dihydro-3H-benzothiazol-5-yl group, dihydro-3H-benzothiazol-4-yl group, quinolin-6-yl group, quinolin-3-yl group, quinolin-5-yl group, quinolin-7-yl group, dihydro-1H-quinolin-6-yl group, dihydro-1H-quinolin-5-yl group, benzo[d]isothiazol-5-yl group, benzo[d]isothiazol-4-yl group, benzo[d]isothiazol-6-yl group, benzo[d]isothiazol-7-yl group, 1H-indazol-5-yl group, 1H-indazol-4-yl group, 1H-indazol-6-yl group, benzo[c]isothiazol-5-yl group, benzo[c]isothiazol-4-yl group, benzo[c]isothiazol-6-yl group, benzo[c]isothiazol-7-yl group, 2H-indazol-5-yl group, 2H-indazol-4-yl group, 2H-indazol-6-yl group, imidazo[1,2-a]pyridin-6-yl group, imidazo[1,2-a]pyridin-7-yl group, 1H-pyrrolo[2,3-b]pyridin-5-yl group, 1H-pyrrolo[2,3-b]pyridin-4-yl group, isoquinolin-6-yl group, isoquinolin-3-yl group, isoquinolin-5-yl group, isoquinolin-7-yl group, dihydro-2H-isoquinolin-6-yl group, dihydro-2H-isoquinolin-5-yl group, cinnolin-6-yl group, cinnolin-5-yl group, quinazolin-6-yl group, quinazolin-7-yl group, quinazolin-5-yl group, quinoxalin-2-yl group, quinoxalin-6-yl group, quinoxalin-5-yl group, 1H-benzimidazol-5-yl group, 1H-benzimidazol-4-yl group, benzoxazol-5-yl group, benzoxazol-6-yl group, benzoxazol-4-yl group, benzoxazol-7-yl group, 1H-pyrrolo[3,2-b]pyridin-5-yl group, 1H-pyrrolo[3,2-b]pyridin-6-yl group,

benzo[1,2,5]thiadiazol-5-yl group, benzo[1,2,5]thiadiazol-4-yl group, 1H-benzotriazol-5-yl group, 1H-benzotriazol-4-yl group, 1,3-dihydropyrrolo[2,3-b]pyridin-5-yl group, 1,3-dihydropyrrolo[2,3-b]pyridin-4-yl group, 1,3-dihydrobenzimidazol-5-yl group, 1,3-dihydrobenzimidazol-4-yl group, dihydro-3H-benzoxazol-6-yl group, dihydro-3H-benzoxazol-7-yl group, dihydro-3H-benzoxazol-5-yl group, dihydro-3H-benzoxazol-4-yl group, phthalazin-6-yl group, phthalazin-5-yl group, [1,8]naphthalidin-3-yl group, [1,8]naphthalidin-4-yl group, [1,5]naphthalidin-3-yl group, [1,5]naphthalidin-4-yl group, 1H-pyrrolo[3,2-c]pyridin-6-yl group, 1H-pyrrolo[3,2-c]pyridin-4-yl group, 1H-pyrrolo[2,3-c]pyridin-5-yl group, 1H-pyrrolo[2,3-c]pyridin-4-yl group, 1H-pyrazolo[4,3-b]pyridin-5-yl group, 1H-pyrazolo[4,3-b]pyridin-6-yl group, 1H-pyrazolo[4,3-c]pyridin-6-yl group, 1H-pyrazolo[4,3-c]pyridin-4-yl group, 1H-pyrazolo[3,4-c]pyridin-5-yl group, 1H-pyrazolo[3,4-c]pyridin-4-yl group, 1H-pyrazolo[3,4-b]pyridin-5-yl group, 1H-pyrazolo[3,4-b]pyridin-4-yl group, [1,2,4]triazolo[4,3-a]pyridin-6-yl group, [1,2,4]triazolo[4,3-a]pyridin-7-yl group, thieno[3,2-c]pyridin-2-yl group, thieno[3,2-c]pyridin-3-yl group, thieno[3,2-c]pyridin-6-yl group, thieno[3,2-b]pyridin-2-yl group, thieno[3,2-b]pyridin-3-yl group, thieno[3,2-b]pyridin-5-yl group, thieno[3,2-b]pyridin-6-yl group, 1H-thieno[3,2-c]pyrazol-5-yl group, 1H-thieno[3,2-c]pyrazol-4-yl group, benzo[d]isoxazol-5-yl group, benzo[d]isoxazol-4-yl group, benzo[d]isoxazol-6-yl group, benzo[d]isoxazol-7-yl group, benzo[c]isoxazol-5-yl group, benzo[c]isoxazol-4-yl group, benzo[c]isoxazol-6-yl group, benzo[c]isoxazol-7-yl group, indolizin-7-yl group, indolizin-6-yl group, indolizine-8-yl group, 1,3-dihydroindol-5-yl group, 1,3-dihydroindol-4-yl group, 1,3-dihydroindol-6-yl group, 1H-pyrazolo[3,4-d]thiazol-5-yl group, 2H-isoindol-5-yl group, 2H-isoindol-4-yl group, [1,2,4]triazolo[1,5-a]pyrimidin-6-yl group, 1H-pyrazolo[3,4-b]pyrazin-5-yl group, 1H-imidazo[4,5-b]pyrazin-5-yl group, 7H-purin-2-yl group, 4H-chromen-6-yl group, or 4H-chromen-5-yl group, wherein these groups may be substituted with one of Xa

or two or more of the same or different Xa.

22. The compound or salt thereof according to any one of claim 19 to 21, wherein Rz is a linear or branched saturated alkyl group having 1 to 8 carbon atoms, or Rz is Ra, Rb, or Rc, k in Ra is 0 or an integer of 1 to 3, R<sup>1</sup> is a saturated cyclic alkyl group having 3 to 7 carbon atoms or a condensed saturated cyclic alkyl group having 6 to 8 carbon atoms, R<sup>1</sup> may be substituted with one of lower alkyl group having 1 to 4 carbon atoms or two or more of the same or different lower alkyl groups having 1 to 4 carbon atoms, Q in Rb is phenyl group, thienyl group, furyl group, pyrrolyl group, pyridyl group, oxazolyl group, isoxazolyl group, thiazolyl group, isothiazolyl group, imidazolyl group, pyrazolyl group, oxadiazolyl group, thiadiazolyl group, triazolyl group, tetrazolyl group, naphthyl group, tetrahydronaphthyl group, indanyl group, indenyl group, quinolyl group, isoquinolyl group, indolyl group, benzofuryl group, benzothienyl group, benzimidazolyl group, benzoxazolyl group, benzothiazolyl group, indazolyl group, 4H-chromenyl group, dihydrobenzodioxyl group, benzoisoxazolyl group, pyrrolopyridinyl group, pyrazolopyridinyl group, triazolopyridinyl group, thienopyridinyl group, thienopyrazolyl group, 1,3-dihydrobenzimidazole group, dihydro-3H-benzoxazole group, or dihydro-3H-benzothiazole group (the aforementioned groups binds to A<sup>2</sup> at an arbitrary position), A<sup>1</sup> is a single bond or an alkylene (a) having 1 to 3 carbon atoms, the alkylene (a) may be substituted with a lower alkyl group having 1 to 4 carbon atoms or phenyl group, A<sup>2</sup> is a single bond, oxygen atom, sulfur atom, -S(O)-, -S(O)<sub>2</sub>-, or -N(R<sup>4</sup>)- (provided that when A<sup>2</sup> represents oxygen atom, sulfur atom, -S(O)-, -S(O)<sub>2</sub>-, or -N(R<sup>4</sup>)-, A<sup>1</sup> represents ethylene or trimethylene), R<sup>2</sup> and R<sup>3</sup> independently represent hydrogen atom, a linear or branched saturated alkyl group having 1 to 4 carbon atoms, oxo group, thioxo group, fluorine atom, chlorine atom, bromine atom, trifluoromethyl group, -OR<sup>5</sup>, -N(R<sup>6</sup>)(R<sup>6</sup>'), -NHCOR<sup>7</sup>, -NHSO<sub>2</sub>R<sup>8</sup>, or -A<sup>6</sup>-Qa, or they bind to each other to

represent methylenedioxy group, Qa is phenyl group, pyridyl group, oxazolyl group, isoxazolyl group, thiazolyl group, isothiazolyl group, imidazolyl group, pyrazolyl group, oxadiazolyl group, thiadiazolyl group, triazolyl group, tetrazolyl group, naphthyl group, indanyl group, indenyl group, quinolyl group, isoquinolyl group, indolyl group, benzofuryl group, benzothienyl group, benzimidazolyl group, benzoxazolyl group, benzothiazolyl group, or indazolyl group (these groups may be substituted with one of T<sup>1</sup> or two or more of the same or different T<sup>1</sup>, and bind to A<sup>6</sup> at an arbitrary position on the ring), R<sup>4</sup> and R<sup>6</sup> independently represent hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms, R<sup>5</sup> and R<sup>7</sup> independently represent hydrogen atom, a lower alkyl group having 1 to 4 carbon atoms, or -A<sup>6</sup>-Qa, R<sup>8</sup> is a lower alkyl group having 1 to 4 carbon atoms, R<sup>6</sup> has the same meaning as R<sup>6</sup>, or binds to R<sup>6</sup> to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to form a saturated nitrogen-containing cycloalkyl group or morpholino group, p in R<sub>c</sub> is an integer of 2 to 4, A<sup>4</sup> is a single bond or methylene or ethylene, A<sup>5</sup> is -C(O)-, -C(S)-, or -S(O)<sub>2</sub>-, R<sub>d</sub> is hydrogen atom, an alkyl group having 1 to 8 carbon atoms, or Qa, R<sub>e</sub> is an alkyl group having 1 to 8 carbon atoms, -A<sup>6</sup>-Qa, -(CH<sub>2</sub>)<sub>i</sub>R<sup>14</sup>, -OR<sup>28</sup>, -SR<sup>28</sup>, or -N(R<sup>29</sup>)(R<sup>30</sup>), i is an integer of 1 to 3, R<sup>14</sup> is hydroxyl group, an alkoxy group having 1 to 4 carbon atoms, carboxyl group, or an N,N-dialkylcarbamoyl group having 1 to 4 carbon atoms, R<sup>28</sup> is an alkyl group having 1 to 8 carbon atoms or -A<sup>6</sup>-Qa, R<sup>29</sup> is an alkyl group having 1 to 8 carbon atoms, an alkoxy carbonyl group having 1 to 4 carbon atoms, or -A<sup>6</sup>-Qa group, R<sup>30</sup> is hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms, or binds to R<sup>29</sup> to form a 3- to 6-membered ring together with the nitrogen atom to which they bind to form a saturated nitrogen-containing cycloalkyl group or morpholino group, and R<sub>y</sub> is hydrogen atom, an alkyl group having 1 to 8 carbon atoms, or binds to R<sub>z</sub> to form a saturated or unsaturated nitrogen-containing cyclic substituent having 3 to 7 atoms together with nitrogen atom to which they binds and said nitrogen-containing cyclic

substituent may be substituted with one or two lower alkyl groups having 1 to 4 carbon atoms wherein said two alkyl groups may be the same or different.

23. The compound or salt thereof according to claim 7, wherein Rs binds to C<sup>4</sup> in the aromatic ring (E), C<sup>5</sup> is a ring-constituting carbon atom substituted with Zx, or an unsubstituted ring-constituting carbon atom, C<sup>2</sup> and C<sup>6</sup> are unsubstituted ring-constituting carbon atoms, Rs is -D-Rx, and D is a single bond, sulfur atom, -S(O)-, -S(O)<sub>2</sub>-, or -C(O)-.

24. The compound or salt thereof according to claim 7, wherein n is an integer of 2, Rs binds to C<sup>4</sup> in the aromatic ring (E), C<sup>5</sup> is carbon atom substituted with -N(Rn<sup>1</sup>)(Rn<sup>2</sup>) (provided that one of Rn<sup>1</sup> and Rn<sup>2</sup> is a substituent other than hydrogen atom), C<sup>2</sup> and C<sup>6</sup> are unsubstituted ring-constituting carbon atoms, Rs is -O-Rx, and Y is hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms.

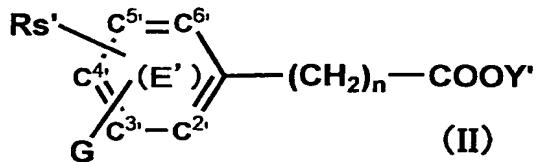
25. The compound or salt thereof according to claim 7, wherein n is an integer of 2, Rs binds to C<sup>4</sup> in the aromatic ring (E), C<sup>5</sup> is a ring-constituting carbon atom substituted with the substituent Zx, or an unsubstituted ring-constituting carbon atom, C<sup>2</sup> and C<sup>6</sup> are unsubstituted ring-constituting carbon atoms, Rs is -O-Rc, and Y is hydrogen atom or a lower alkyl group having 1 to 4 carbon atoms.

26. A medicament containing the compound according to any one of claims 1 to 25 or a pharmacologically acceptable salt thereof as an active ingredient.

27. An agent for suppressing production of a prostaglandin and/or leukotriene, which comprises the compound according to any one of claims 1 to 25 or a pharmacologically acceptable salt thereof as an active ingredient.

28. The medicament according to claim 26, which is for prophylactic and/or therapeutic treatment of a disease caused by production of a prostaglandin and/or leukotriene.

29. A compound represented by the formula (II):



[In the formula,  $C^{2'}$ ,  $C^{3'}$ ,  $C^{4'}$ ,  $C^{5'}$ , and  $C^{6'}$  in the aromatic ring (E') independently represent a ring-constituting carbon atom, any one of them to which  $R_s'$  and G do not bind may be replaced with V',

$V'$  represents nitrogen atom, or carbon atom substituted with  $Zx'$ ,  $Zx'$  has the same meaning as  $Zx$  mentioned above, provided that when  $Zx$  contains hydroxyl group, the hydroxyl group may be protected with  $Rp^1$ , and when  $Zx$  contains amino group, the amino group may be protected with  $Rp^2$ ,

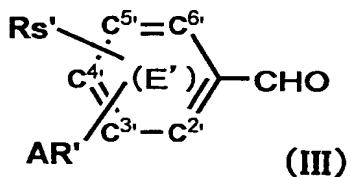
Rs' represents -D-Rx' or -N(Ry')(Rz'),

-D-Rx' and -N(Ry')(Rz') have the same meanings as -D-Rx and -N(Ry)(Rz) mentioned above, respectively, provided that when -D-Rx or -N(Ry)(Rz) contains hydroxyl group, the hydroxyl group may be protected with Rp<sup>1</sup>, and when -D-Rx or -N(Ry)(Rz) contains amino group, the amino group may be protected with Rp<sup>2</sup>,

G represents chlorine atom, bromine atom, iodine atom, mesylate group, triflate group, or an arenesulfonate group of which aromatic portion may be substituted with one of T<sup>1</sup> or two or more of the same or different T<sup>1</sup>, and

Y' represents a lower alkyl group having 1 to 4 carbon atoms).

30. A compound represented by the formula (III):



[In the formula, C<sup>2'</sup>, C<sup>3'</sup>, C<sup>4'</sup>, C<sup>5'</sup> and C<sup>6'</sup> in the aromatic ring (E') independently

represent a ring-constituting carbon atom, any one of these ring-constituting carbon atoms to which  $Rs'$  and  $AR'$  do not bind may be replaced with  $V'$ , and  $AR'$  has the same meaning as that of  $AR$ , provided that when  $AR$  contains hydroxyl group, the hydroxyl group may be protected with  $Rp^1$ , and when  $AR$  contains amino group, the amino group may be protected with  $Rp^2$ ].